## BioData: An aquatic Bioassessment Database for the Nation

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The new U.S. Geological Survey (USGS) BioData system stores and serves aquatic bioassessment data (biological community and physical habitat data) collected by USGS scientists from stream ecosystems across the nation. The system has two parts, BioData input and BioData retrieval. BioData input provides tools for project management, stores data collected by USGS using both USGS and EPA national protocols, allows for entry of field sample and habitat data, accepts data uploads from USGS and other taxonomic laboratories, as well as provides internal data checking and review to insure accurate community data for integrated water quality programs. BioData retrieval allows scientists, resource managers, teachers, and the public to retrieve data using an online query. Retrieval criteria can be saved on a desktop for future queries. Users are able to find the data of interest based on criteria (filters) such as data type, location, date, or taxonomy. Currently, over 20,000 fish, invertebrate, and algae community sample data collected as part of the National Water-Quality Assessment (NAWQA) program and other USGS projects are in BioData. BioData architecture has been designed to accommodate more protocols in the future and may soon have the ability to support data exchange standards. Both the internal data storage and external data retrieval systems of BioData are now on-line (URL: http://aquatic.biodata.usgs.gov) and ready to help enhance your scientific investigations. The BioData system will help USGS scientists fulfill their mission of providing high-quality data about the earth's aquatic resources.